

Amendments to the Claims



Claims 1-75 (Canceled).

76. (Previously Presented): A semiconductor substrate processing chamber and accessory attachment interfacial structure, comprising:

a body sized and shaped to engage with and between a semiconductor substrate processing chamber and an accessory attachment which is exposed to the processing chamber effective to space the processing chamber and accessory attachment from one another, the body having first and second faces;

the body comprising an external perimeter extending between the first and second faces;

the body comprising a volume in at least one cross sectional region which extends to diametrically opposing portions of the perimeter along a shortest distance between the processing chamber and accessory attachment when said body is engaged with and between said processing chamber and accessory attachment, at least a majority of said cross sectional region constituting a mass of substantially non-metallic and thermally insulative material, the mass of material being sufficient to effectively reduce heat transfer between the semiconductor processing chamber and the accessory attachment when so engaged than would otherwise occur in the absence of said mass of material when so engaged; and

the body comprising a plurality of openings which extend through the thermally insulative material, and comprising load bearing plugs received

within at least some of the openings in the thermally insulative material, the load bearing plugs having greater compression strength than the thermally insulative material, at least some of the load bearing plugs being entirely solid and at least some including a hollow portion.

77. (Original): The interfacial structure of claim 76 comprising mounting openings extending through the mass of material.

78. (Original): The interfacial structure of claim 76 wherein the substantially non-metallic and thermally insulative material is polymeric.

79. (Original): The interfacial structure of claim 76 wherein the substantially non-metallic and thermally insulative material is a gel.

80. (Original): The interfacial structure of claim 76 wherein the substantially non-metallic and thermally insulative material is ceramic.

81. (Original): The interfacial structure of claim 76 wherein the substantially non-metallic and thermally insulative material is porous.

82. (Original): The interfacial structure of claim 76 wherein the substantially non-metallic and thermally insulative material is a glass.

83. (Original): The interfacial structure of claim 76 wherein the substantially non-metallic and thermally insulative material is a combination of at least two of solid, liquid and gas.

84. (Previously Presented): The interfacial structure of claim 76 comprising a sealant channel received on the body.

85. (Previously Presented): The interfacial structure of claim 84 wherein the sealant channel comprises an o-ring groove.

86. (Original): The interfacial structure of claim 76 wherein the cross sectional region is at least one inch deep.

87. (Original): The interfacial structure of claim 76 wherein the cross sectional region is from one inch to two inches deep.

88. (Original): The interfacial structure of claim 76 wherein the body comprises substantially metallic material, the body having a greater volume of substantially non-metallic and thermally insulative material than of substantially metallic material.

Claims 89-91 (Canceled).

92. (Previously Presented): A semiconductor substrate processing chamber and accessory attachment interfacial structure, comprising:

a body sized and shaped to engage with and between a semiconductor substrate processing chamber and an accessory attachment which is exposed to the processing chamber, the body having first and second faces;

the body comprising an external perimeter extending between the first and second faces;

the body comprising a volume in at least one cross sectional region which extends to diametrically opposing portions of the perimeter along a shortest distance between the processing chamber and accessory attachment when said body is engaged with and between said processing chamber and accessory attachment, at least a majority of said cross sectional region constituting a mass of substantially non-metallic and thermally insulative material, the mass of material being sufficient to effectively reduce heat transfer between the semiconductor processing chamber and the accessory attachment when so engaged than would otherwise occur in the absence of said mass of material when so engaged; and

the body comprising a plurality of openings which extend through the thermally insulative material, and comprising load bearing plugs received within at least some of the openings in the thermally insulative material, the

load bearing plugs having greater compression strength than the thermally insulative material, at least some of the load bearing plugs being entirely solid and at least some including a hollow portion.

93. (Previously Presented): The interfacial structure of claim 76 wherein the body is substantially rectangular having outermost corners, at least four of said openings and load bearing plugs being respectively received proximate the outermost corners.

94. (Original): The interfacial structure of claim 93 wherein said four load bearing plugs are entirely solid.

95. (Previously Presented): A semiconductor substrate processing chamber and accessory attachment interfacial structure, comprising:

a body sized and shaped to engage with and between a semiconductor substrate processing chamber and an accessory attachment which is exposed to the processing chamber, the body comprising a total volume, at least a majority of the total volume being a mass of material which is substantially non-metallic and thermally insulative, the mass of material being sufficient to effectively reduce heat transfer between the semiconductor processing chamber and the accessory attachment when so engaged than would otherwise occur in the absence of said mass of material when so engaged; and

the body comprising a plurality of openings which extend through the thermally insulative material, and comprising load bearing plugs received within at least some of the openings in the thermally insulative material, the load bearing plugs having greater compression strength than the thermally insulative material, at least some of the load bearing plugs being entirely solid and at least some including a hollow portion.

96. (Original): The interfacial structure of claim 95 comprising mounting openings extending through the mass of material.

97. (Original): The interfacial structure of claim 95 wherein the substantially non-metallic and thermally insulative material is polymeric.

98. (Original): The interfacial structure of claim 95 wherein the substantially non-metallic and thermally insulative material is a gel.

99. (Original): The interfacial structure of claim 95 wherein the substantially non-metallic and thermally insulative material is ceramic.

100. (Original): The interfacial structure of claim 95 wherein the substantially non-metallic and thermally insulative material is porous.

101. (Original): The interfacial structure of claim 95 wherein the substantially non-metallic and thermally insulative material is a glass.

102. (Original): The interfacial structure of claim 95 wherein the substantially non-metallic and thermally insulative material is a combination of at least two of solid, liquid and gas.

103. (Previously Presented): The interfacial structure of claim 95 comprising a sealant channel received on the body.

Claims 104-107 (Canceled).



108. (Previously Presented): The interfacial structure of claim 95 wherein the body is substantially rectangular having outermost corners, at least four of said openings and load bearing plugs being respectively received proximate the outermost corners.

109. (Original): The interfacial structure of claim 108 wherein said four load bearing plugs are entirely solid.

110. (Previously Presented): The interfacial structure of claim 76 wherein at least some of the load bearing plugs which are entirely solid have outer longitudinal surfaces which are not threaded.

111. (Previously Presented): The interfacial structure of claim 76 wherein at least some of the load bearing plugs which are entirely solid have some outer longitudinal surface portion which is straight linear along a length of said entirely solid load bearing plugs.

112. (Previously Presented): The interfacial structure of claim 76 wherein at least some of the load bearing plugs which include a hollow portion have outer longitudinal surfaces which are not threaded.

113. (Previously Presented): The interfacial structure of claim 76 wherein at least some of the load bearing plugs which include a hollow portion have some outer longitudinal surface portion which is straight linear along a length of said load bearing plugs which include a hollow portion.

114. (Previously Presented): The interfacial structure of claim 95 wherein at least some of the load bearing plugs which are entirely solid have outer longitudinal surfaces which are not threaded.

115. (Canceled).

116. (Previously Presented): The interfacial structure of claim 95 wherein at least some of the load bearing plugs which are entirely solid have some outer longitudinal surface portion which is straight linear along a length of said entirely solid load bearing plugs.

117. (Previously Presented): The interfacial structure of claim 95 wherein at least some of the load bearing plugs which include a hollow portion have outer longitudinal surfaces which are not threaded.

118. (Previously Presented): The interfacial structure of claim 95 wherein at least some of the load bearing plugs which include a hollow portion have some outer longitudinal surface portion which is straight linear along a length of said load bearing plugs which include a hollow portion.

119. (Previously Presented): The interfacial structure of claim 76 wherein at least some of the load bearing plugs which include a hollow portion have at least one radial projection, the body comprising interlocking openings sized to receive said radial projections effective to preclude rotation of said load bearing plugs which include a hollow portion.

120. (Previously Presented): The interfacial structure of claim 95 wherein at least some of the load bearing plugs which include a hollow portion have at least one radial projection, the body comprising interlocking openings sized to receive said radial projections effective to preclude rotation of said load bearing plugs which include a hollow portion.

Claims 121-126 (Canceled).

127. (New): A semiconductor substrate processing chamber and accessory attachment interfacial structure, comprising:

a body sized and shaped to engage with and between a semiconductor substrate processing chamber and an accessory attachment which is exposed to the processing chamber effective to space the processing chamber and accessory attachment from one another, the body having first and second faces;

the body comprising an external perimeter extending between the first and second faces;

the body comprising a volume in at least one cross sectional region which extends to diametrically opposing portions of the perimeter along a shortest distance between the processing chamber and accessory attachment when said body is engaged with and between said processing chamber and accessory attachment, at least a majority of said cross sectional region constituting a mass of substantially non-metallic and thermally insulative material; and

the body comprising a plurality of openings which extend through the thermally insulative material, and comprising load bearing plugs received within at least some of the openings in the thermally insulative material, the load bearing plugs having greater compression strength than the thermally insulative material, at least some of the load bearing plugs being entirely solid and at least some including a hollow portion.

128. (New): A semiconductor substrate processing chamber and accessory attachment interfacial structure, comprising:

a body sized and shaped to engage with and between a semiconductor substrate processing chamber and an accessory attachment which is exposed to the processing chamber, the body having first and second faces;

the body comprising an external perimeter extending between the first and second faces;

the body comprising a volume in at least one cross sectional region which extends to diametrically opposing portions of the perimeter along a shortest distance between the processing chamber and accessory attachment when said body is engaged with and between said processing chamber and accessory attachment, at least a majority of said cross sectional region constituting a mass of substantially non-metallic and thermally insulative material; and

the body comprising a plurality of openings which extend through the thermally insulative material, and comprising load bearing plugs received within at least some of the openings in the thermally insulative material, the load bearing plugs having greater compression strength than the thermally insulative material, at least some of the load bearing plugs being entirely solid and at least some including a hollow portion.

129. (New): A semiconductor substrate processing chamber and accessory attachment interfacial structure, comprising:

a body sized and shaped to engage with and between a semiconductor substrate processing chamber and an accessory attachment which is exposed to the processing chamber, the body comprising a total volume, at least a majority of the total volume being a mass of material which is substantially non-metallic and thermally insulative; and

the body comprising a plurality of openings which extend through the thermally insulative material, and comprising load bearing plugs received within at least some of the openings in the thermally insulative material, the load bearing plugs having greater compression strength than the thermally insulative material, at least some of the load bearing plugs being entirely solid and at least some including a hollow portion.